

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

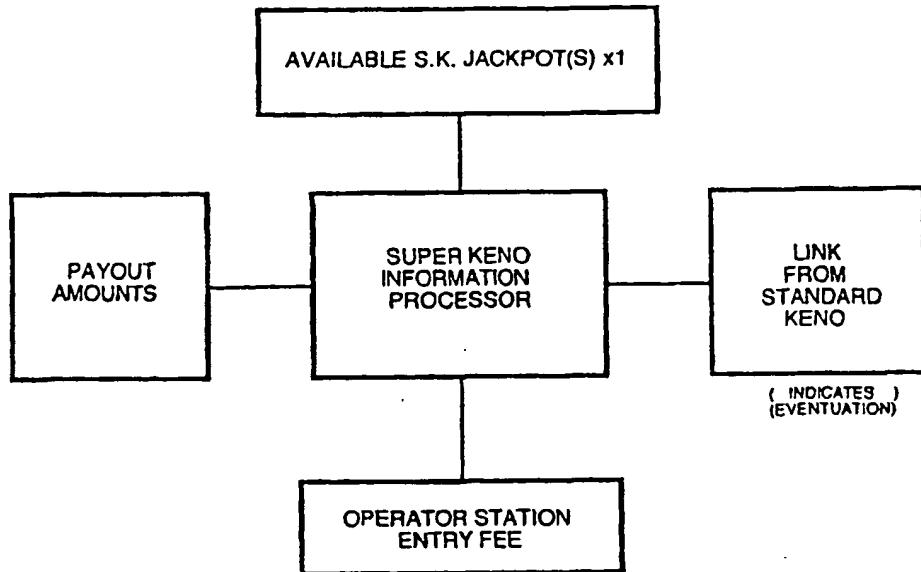


RR

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : A63F 3/08, G06F 19/00, 161/00		A1	(11) International Publication Number: WO 95/05876 (43) International Publication Date: 2 March 1995 (02.03.95)
(21) International Application Number: PCT/AU94/00503		(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD).	
(22) International Filing Date: 29 August 1994 (29.08.94)			
(30) Priority Data: PM 0847 27 August 1993 (27.08.93) AU			
(71)(72) Applicant and Inventor: BYRNE, Christopher, Russell [AU/AU]; 7B Ingamells Street, Prospect, TAS 7250 (AU).		Published <i>With international search report.</i>	
(74) Agent: A. TATLOCK & ASSOCIATES; 21 Queensberry Street, Carlton, VIC 3053 (AU).			

(54) Title: SUPER KENO



(57) Abstract

In a gambling game a collateral gambling game which can be won by players on at least one specific event occurring in the principal game, the collateral game being separate from the principal game but one when any of the possible winning events occur in the principal game, the payment to the player being calculated from the total value available for the game divided by the total number of players who bet on the specific winning event. The game gives a possibility for a large number of players to share in the success of a single player who has successfully won the main game. It may be used with various types of games including those using electronic gaming machines.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	GB	United Kingdom	MR	Mauritania
AU	Australia	GE	Georgia	MW	Malawi
BB	Barbados	GN	Guinea	NE	Niger
BE	Belgium	GR	Greece	NL	Netherlands
BF	Burkina Faso	HU	Hungary	NO	Norway
BG	Bulgaria	IE	Ireland	NZ	New Zealand
BJ	Benin	IT	Italy	PL	Poland
BR	Brazil	JP	Japan	PT	Portugal
BY	Belarus	KE	Kenya	RO	Romania
CA	Canada	KG	Kyrgyzstan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CG	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SI	Slovenia
CI	Côte d'Ivoire	LI	Liechtenstein	SK	Slovakia
CM	Cameroon	LK	Sri Lanka	SN	Senegal
CN	China	LU	Luxembourg	TD	Chad
CZ	Czechoslovakia	LV	Latvia	TG	Togo
CZ	Czech Republic	MC	Monaco	TJ	Tajikistan
DE	Germany	MD	Republic of Moldova	TT	Trinidad and Tobago
DK	Denmark	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	US	United States of America
FI	Finland	MN	Mongolia	UZ	Uzbekistan
FR	France			VN	Viet Nam
GA	Gabon				

SUPER KENO

This invention relates to gaming and, in particular, to a collateral game to be played in association with a principal game.

Generally, I shall describe the invention in relation to Keno and for convenience, I shall name the collateral game "Super Keno".

In the game "Keno", a player attempts to select a number of winning numbers out of a predetermined set of numbers and the game normally has a number of classes or divisions of prizes depending on the numbers selected.

That is, the player can select a first group of numbers out of a total group, say, 10 out of 80 and can then further select the number of correct results when the winning numbers are selected from a relatively small number, say 4 of the 10 up to a high number, say the whole 10 of 10.

Of course, the likelihood of success becomes less as the percentage of the numbers required becomes higher and the rewards on winning are generally higher the less the likelihood of success.

Keno is played in a number of different venues from individual casinos, through a networked game across groups of venues, commonly known in Australia as Club Keno and also, in a

general public game which may be played on a daily, weekly, or other basis and which is open to all players through a number of different outlets.

One seen problem with Keno is that it is an individual game and, generally, other players are not excited when there is a winner, except in the relatively unusual situation of winners of very high amounts.

It is the object of the present invention to provide a collateral game where players may take a second entry when they are playing the game, generally for a small additional investment and should the additional entry be associated with the winning entry in a predetermined way, then the holders of the entries in the collateral game, will share a jackpot based on the payments made to the collateral game.

In its broadest sense, the invention includes in a gambling game where there may be a number of events selected ones of which can lead to a winning result, a collateral game which can be entered by players selecting at least one of the winnings result types characterised in that where a or the selected result type is achieved, all players who had selected that result type are paid a share of the available amount for that result type which payment depends on the amount invested by the individual player and the total amount invested by players in the collateral game since there has last been a

winning result of that result type.

The invention also includes in a gambling game where there may be a number of events one of which can lead to a winning result type, a collateral game which can be entered by players of the game in respect of selecting a parameter associated with the winning result type characterised in that on a winning result all players of the collateral game which have selected the parameter associated with the result type are paid a share of the available amount for that parameter of the result type which payment depends on the amount invested by the individual player and the total amount invested by players in the collateral game since there has last been a winning result in which the parameter has been selected.

In order that the invention may be more readily understood, I shall describe certain forms of the collateral game both as "Super Keno", that is the game associated with Keno, and as a machine based game and other applications.

Referring to the game "Super Keno" which is a collateral game to Keno, this game is designed to add excitement and interest for the players and to increase revenue for the house. The standard Keno game remains unchanged and Super Keno is simple to play and in operation and adds a new dimension to Keno.

Super Keno is an additional bet operating in conjunction with

Example 1

Multi-game play - Single Jackpot/Division.

(Example for Super Keno $\frac{9}{9}$, Jackpot/Division).

A player wishing to enter Super Keno buys 5 (x-amount) standard Keno games (Eg: games 010-015; any desired standard Keno tickets may be played) and pays an additional, say, \$1.00 (y-amount) Super Keno fee. This \$1.00 (y-amount) is added to the Super Keno $\frac{9}{9}$, Jackpot/Division (nine out of nine) and enters the player for say 5 (x-amount) consecutive Keno games or such other number as determined. A "share" in the Super Keno $\frac{9}{9}$, Jackpot/Division is won by all players entered if any player playing standard $\frac{9}{9}$, Keno wins the major $\frac{9}{9}$, Jackpot/Division during the game(s) in which the Super Keno $\frac{9}{9}$, entries are valid.

$$\text{Super Keno } \frac{9}{9} \text{ share} = \frac{\text{Total "Super Keno } \frac{9}{9} \text{ Jackpot/}}{\text{Division - (House Tax + Seeding)}} \cdot \frac{\text{Total number of Super Keno } \frac{9}{9} \text{ entrants on winning of}}{\text{standard } \frac{9}{9} \text{ Keno Jackpot}}$$

Thus if the total Super Keno $\frac{9}{9}$, Jackpot = \$875,000.00 and the "House + Seeding" = \$475,000.00

and 100 entrants are recorded for winning game then

$$1 \text{ share (Super Keno } \frac{9}{9}) = \frac{875,000 - 475,000}{100} = \frac{400,000}{100} = \$4,000$$

Therefore 1 Super Keno $\frac{1}{9}$, share = \$4,000.00

* (Based on calculations shown in Example 5)

If there are a number of results which can lead to a Super Keno win, then the general equation is:

$$\frac{1 \text{ Super Keno } \frac{1}{9} \text{ Share}}{\text{Total number of Super Keno entrants when standard } \frac{x}{x} \text{ Jackpot is won}} = \frac{\text{Total Super Keno } \frac{1}{x} \text{ Jackpot} - (\text{House tax + Seeding to new } \frac{1}{x} \text{ Super Keno Jackpot})}{\text{Total number of Super Keno entrants when standard } \frac{x}{x} \text{ Jackpot is won}}$$

Thus for 100 Super Keno entrants recorded for the winning game ($\frac{1}{9}$) each would receive \$4,000.00 each. The scenario would be the following. One person wins the standard $\frac{1}{9}$, jackpot, say approximately \$600,000 and at the same time 100 people win \$4,000 each, the value of one share in the Super Keno - $\frac{1}{9}$, Jackpot. It will be appreciated that this can lead to much greater excitement than would be the case if there is only a single winner and can provide great publicity for the house.

If required, the game could be played for any other result, such as $\frac{3}{3}$, $\rightarrow \frac{10}{10}$ as pre-determined and entries could be made for Jackpot divisions relating to any successful result.

Operating Modes: (Super Keno can operate in a number of different modes).

1. Single - Jackpot/Division: multi-game (already described - see Example 1.)

2. Single - Jackpot/Division: Single-game
3. Multi - Jackpot/Division: Single-game
4. Multi - Jackpot/Division: Multi-game

Super Keno can also operate with smaller Jackpots/Divisions activated by smaller standard Keno Jackpot/Divisions.

ie. Results such as:-

1. 8 out of 8 ($^8/8$)
2. 7 out of 7 ($^7/7$)
3. 6 out of 6 ($^6/6$)
4. 5 out of 5 ($^5/5$)

Super Keno can also be used with probable larger Jackpots which occur in larger standard Keno Jackpots/Divisions;

ie. Results such as:-

1. 10 out of 10 ($^{10}/_{10}$)
2. 11 out of 11 ($^{11}/_{11}$)

For all Super Keno Jackpots/Divisions, a starter Jackpot (Seeding) may be desirable to ensure that even if there is an early win in the Keno game which would lead to a Super Keno payout. Although in some of the equations, we have shown the seeding being deducted, it may be preferred to use a manner of repaying the seeding which impacts on winners as little as possible, that is over time.

Whilst I have described Super Keno as being associated with players of the Keno game, it can, if required, also operate in an independent mode where a standard Keno entry need not be purchased.

Referring to the operating modes set out above:

1. Single Jackpot/Division - multi-game (see Example 1)
2. Single Jackpot/Division - single-game.

Example 2 - For Super Keno $\frac{1}{7}$, division. A player wishing to enter "Super Keno $\frac{1}{7}$," buys 1 standard Keno game (eg game 115) and pays an additional \$1.00 (y-amount) Super Keno $\frac{1}{7}$, fee. This \$1.00 (y-amount) Super Keno fee is added to the Super Keno $\frac{1}{7}$, Jackpot/Division. Any desired standard Keno ticket may be played, any amount of Super Keno $\frac{1}{7}$, shares may be purchased. A share in the Super Keno $\frac{1}{7}$, Jackpot/Division is won by the player if any player playing standard $\frac{1}{7}$, Keno wins the full standard $\frac{1}{7}$, Keno division in game number 115.

3. Multi Jackpot/Division: Single-game

Example 3

A player (Player A) wishing to enter Super Keno buy, 1 (x-amount) standard Keno game (Eg: game 115) and pays an additional Super Keno fee (y-amount) per required Super Keno Jackpot/Division as entered ($\frac{3}{3} \rightarrow \frac{10}{10}$). (Any standard Keno Division may be played.) The Super Keno Jackpot/Division fee(s) as entered are added to the respective Super Keno Jackpot(s)/Division(s). The player may purchase as many

shares per division as required. If any player playing standard Keno wins a full division in game number 115 and the full standard Keno Jackpot/Division (${}^3/_3 \rightarrow {}^{10}/_{10}$ etc) corresponds to a selected Super Keno Jackpot/Division entered by player A then Player A will receive 1 share of the respective Super Keno Jackpot/Division as entered.

4. Multi Jackpot/Division: multi game

Example 4

A player (player A) wishing to enter Super Keno buys 10 (x-amount) standard Keno games (eg games 010-020) and pays an additional Super Keno fee (y-amount) per respective Super Keno Jackpot/Division as entered (${}^3/_3 \rightarrow {}^{10}/_{10}$ etc as desired). The Super Keno Jackpot/Division fee(s) entered (by player A) are added to the respective Super Keno Jackpot/Division(s). The player may purchase as many shares per division as desired. If any player playing standard Keno wins a full division during the Super Keno games (010-020) paid for the Player A and the full standard Keno Jackpot/Division (${}^3/_3 \rightarrow {}^{10}/_{10}$ etc) corresponds to a selected Super Keno Jackpot/Division (as entered by Player A) then Player A will receive 1 share of the respective Super Keno Jackpot/Division entered.

Super Keno Calculations:

Example 5

Based on 125 standard Keno Games per day. 100 people playing Super Keno per 5 games (at \$1.00 per 5 games). The Super Keno

10

Revenue = 100 x 25 = \$2,500 per day. After 350 Days Super Keno Revenue = \$875,000. This is a very simple example of calculations involved.

Super Keno Extra:

Super Keno: Extra is designed to allow players to enter all Super Keno Jackpots/Divisions and play multiple (x-amount) standard Keno Games as required. (the Super Keno fee is distributed to all Super Keno Jackpots/Divisions).

A player wishing to enter "Super Keno: Extra" buys 20 (x-amount) standard Keno games (eg. games 010-030) and pays an additional amount \$2.00 (y-amount) "Super Keno extra" fee. This \$2.00 (y-amount) Super Keno extra fee is distributed to all Super Keno Jackpots/Divisions $\frac{3}{3} \rightarrow \frac{10}{10}$ etc) as determined. On any winning Super Keno Jackpot/Division $(\frac{3}{3} \rightarrow \frac{10}{10}$ etc), Super Keno players entered at the time of the win are paid their calculated share amount. (Super Keno $\frac{x}{x}$ result is activated by standard Keno $\frac{x}{x}$ result).

The calculation is:

Total amount held in respective Super Keno Jackpot/Division minus (House Tax + Seeding to respective Super Keno Jackpot)
1 Super Keno share = -----
Total number of players (Super Keno players entered in the winning Super Keno Jackpot/Division at result.)

Super Keno: Players Choice

The provision whereas players may choose the Super Keno Jackpot(s)/Division(s) they wish to enter.

A player wishing to enter "Super Keno: Players choice" buy, 5 (x-amount) standard Keno games (eg. games 010-015) and pays an additional \$1.00 (y-amount) "Super Keno: Players Choice" Fee. This fee is added to the respective Super Keno Jackpot(s)/Division(s) as entered. On a division winning Super Keno Players entered are paid their calculated share amount. (Super Keno $\frac{x}{y}$ success is activated by a standard Keno $\frac{x}{y}$ win).

Calculated thus:-

Total amount held in respective winning Super Keno Jackpot/Division minus (House Tax + Seeding to respective Super Keno Jackpot)

1 Super Keno share = -----
Total number of Super Keno extra players
entered in respective winning Super Keno
Jackpot/Division at result

Player Information Display

Display units, which may be computer operated, are desirable to allow Super Keno Players to observe the following information.

1. Indication to players that a Super Keno Jackpot/Division has been achieved. This occurs when standard Keno

Jackpot/Division) occurs. An audible indicator may also be used.

2. The respective winning Super Keno Jackpot/Division ($\frac{3}{3}$, $\frac{10}{10}$, etc).
3. The winning game number (eg. game 015)
4. The total available winning Super Keno Jackpot/Division (Cash amount). (Total available winning Super Keno Jackpot = Total Jackpot minus (House Tax + Seeding))
5. The total number of shares purchased for winning Super Keno Game.
6. The cash value amount of each share.
7. The last Jackpot details may also be displayed (or Toggle between screens during quiescent times)
8. The winning standard Keno numbers (if desired)

One particular display screen could take the form:

Super Keno

WIN WIN WIN WIN

Winning Super Keno Jackpot/Division 7/

Total 7/, Jackpot = \$50,000.00

Game Number: 015

Winning 7/, Shares purchased: 100

1 Share = \$500.00

Winning numbers: 5, 9, 15, 33, 34, 42, 79

Super Keno

If required, the information could be displayed in order with pauses between each display.

If required, a separate display unit can display all Super Keno Jackpots/Divisions in cash amounts.

Super Keno Jackpots

Jackpot/Division	Jackpot
3/3	\$100.05
4/4	\$715.65
5/5	\$1,512.75
6/6	\$4,728.09
7/7	\$8,652.10
8/8	\$14,720.50
9/9	\$400,000.00
10/10	\$1,200,000.00
Present Game Number	055

Super Keno Entry Fee (Registration Fee)

Any satisfactory means of entry to Super Keno can be used. The entry fee can be charged as either a cash or credit amount. 1 Super Keno $\frac{1}{x}$ share = 1 credit. It is envisaged that upon payment of the fee for Super Keno the following information will be printed on either:

1. Existing Keno ticket; or
2. A Super Keno ticket.

1. The game number(s) paid for;
2. The Super Keno Jackpot(s)/Division(s) as entered;
3. The cost per share per Jackpot/Division;
4. The number of shares purchased per Jackpot/Division;
5. The name of the staff member operating the Super Keno (or otherwise) machine;
6. The number of Standard Keno Games purchased (Game number(s)).

Super Keno: Payouts

Upon receipt of a winning Super Keno ticket $\frac{1}{x}$ Jackpot/Division) the Super Keno staff operator will pay the winning Super Keno player the required cash amount (or cheque) based on the number of shares purchased for the winning game, and the value of the winning share (as calculated).

Super Keno: Computer Software

The software required to operate Super Keno will need to be able to perform many tasks. The Super Keno software may be included with standard Keno on the standard system with Super Keno information printed on the standard Keno tickets if desired, or; if required, the Super Keno software may operate independently on a separate computer system with the Super Keno information printed on separate Super Keno tickets.

The tasks required to be performed by the Super Keno Software are as follows:

1. Accept and record all Super Keno wagers;
2. Place all fees in respective Super Keno; Jackpots/Divisions (minus House Tax plus seeding);
3. Be able to recognise a standard Keno result. Thus the software needs to be actively linked to the Standard Keno system to do this.
4. Record and store all information relating to wagers, payouts, tickets;
5. Calculate all share payouts;
6. Payout on stored information (Late ticket claims);
7. Print all required Super Keno information on tickets;
8. Operate all display units;
9. Store Facility: The computer must have memory sufficient to store the results of each share purchased and this information must be accessible for some time after which

Example Math Equation 2

Operating mode 2 Single Jackpot/Division - single game mode

$$1 \text{ Super Keno } \%, \text{ share} = \frac{\text{Total Super Keno } \%, \text{ Jackpot/}}{\text{Division - (House Tax + Seeding)}} \\ \frac{\text{Total Number of Super Keno } \%, \text{ entrants at winning (in game 115)}}{\text{of standard Keno } \%, \text{ Jackpot}}$$

Example Math Equation 3

Operating mode 3 Multi-Jackpot(s)/Division(s): Single-Game

$$1 \text{ Super Keno } \%, \text{ share} = \frac{\text{Total respective winning Super Keno}}{\text{Jackpot/Division } (\%,) \text{ (minus House}} \\ \frac{\text{Tax + Seeding)}}{\text{Total number of respective } (\%,) \text{ Super}} \\ \frac{\text{Keno winning entrants at the time of}}{\text{Standard } (\%,) \text{ Keno Jackpot/Division}} \\ \frac{\text{result } (\%,) \text{ (Game 115))}}{}$$

Example Math Equation 4

Operating mode 4 Multi-Jackpot(s)/Division(s): Multi-game

$$1 \text{ Super Keno } \%, \text{ share} = \frac{\text{Total respective winning Super Keno}}{\text{Jackpot/Division } (\%,) \text{ (minus House}} \\ \frac{\text{Tax + Seeding)}}{\text{Total number of respective Super Keno}} \\ \frac{\text{winning entrants at the time of}}{\text{Standard respective Keno Jackpot/}} \\ \frac{\text{Division result } (\%,))}{}$$

Super Keno: Machine Play

Example

For Super Keno when applied to personal Keno machines operating with a Game Controller. All machines operating at the same game speed - same game begin time and end time, the same number results will apply to each machine within the link-up of machines as controlled by the Game Controller.

Example of Play

(1 Bank of 10 machines multi-linked by a Game Controller)

A player approaches a linked bank of Keno machines and observes that Super Keno is being offered. Super Keno Jackpots are offered for Super Keno Jackpot(s)/Division(s) of [$\frac{4}{4} \rightarrow \frac{10}{10}$ etc] = [$\frac{x}{x} \rightarrow \frac{y}{y}$ etc]: four out of four Jackpot/Division to ten out of ten Jackpot/Division: Super Keno] $\frac{4}{4} \rightarrow \frac{10}{10}$ etc ($\frac{x}{x} \rightarrow \frac{y}{y}$ etc). Each machine has an assortment of buttons allowing entry to any desired Super Keno Jackpot/Division. One possible arrangement is illustrated in Fig. 3.

To play the player deposits "x"-amount of coins (or credit card) into the machine. The player then selects a desired Super Keno Jackpot(s)/Division(s), (Say $\frac{7}{7}$) and allots 1 CREDIT (x-amount) to same. (1 CREDIT entry to Super Keno $\frac{7}{7}$). The player then selects the standard Keno Division ($\frac{1}{1}, \frac{10}{10}$ etc) as desired and the standard Keno number(s) as desired. From the time indicated on the Digital Clock counter the player can see there is about 5 seconds remaining until the next Keno Game begins. The player then watches the drawn game. After the results are known the machine completes all relevant payouts and is ready to accept new wagers/instructions.

Super Keno: Machine Play

(Personal Keno Machine - Personal Gaming Keno Machines)

Example for Super Keno when applied to personal machine use
Keno operating with no Game speed controller, that is all
machines operating at their own rate and independently draw
numbers.

Example of Play

(1 bank of 10 machines - no game controller)

Say Super Keno Jackpots/Divisions are offered for $\frac{3}{3}$, - $\frac{10}{10}$
etc. Each machine has an assortment of buttons allowing entry
to any desired Super Keno Jackpot/Division.

The player deposits "x"-amount of coins (or credits from credit card) into the machine. The player then selects a desired Super Keno Jackpot(s)/Division(s) (say $\frac{1}{1}$,) and allots 1 CREDIT (x-amount) to same. (1 credit = 1 share for Super Keno $\frac{1}{1}$). The player notices that as soon as the Super Keno Jackpot(s)/Division(s) have been paid for, a Digital Clock lights up and becomes operational (counts backwards) as soon as normal standard play begins. The player then selects the standard Keno Division ($\frac{1}{1} - \frac{10}{10}$ etc) as desired and the standard Keno number(s) as desired. As soon as the player pushes the "deal" (start) button s/he is entered in Super Keno. This can be indicated by the digital clock counter beginning to count backwards. As soon as the "deal" (number drawn) is completed the digital clock counter freezes showing time remaining for Super Keno entry, a predetermined amount of time is given. The machine "un-freezes" as soon as normal Keno play continues. The player is entered for 1 share (x-amount) and this 1 share enters the player for "y"-amount of time allowed. If any player playing in the bank of Keno machines wins a standard Keno Division ($\frac{3}{3} - \frac{10}{10}$) corresponding to a Super Keno Jackpot/Division (say $\frac{1}{1}$) as entered by the player, and this occurs while the player is entered for Super Keno, that is the player's machine was operational "dealing" at the time of the standard $\frac{1}{1}$ result, then the player will receive 1 shares worth of the total

available 1/ Super Keno Jackpot/Division. The amount won is displayed on the machine. After the results are known the machine completes all relevant payout(s) and is ready to accept new wagers/instructions.

Summary of Super Keno when used with Keno machines (personal) with no game speed control.

1. Upon payment for Super Keno share(s) a clock counter (TIMER) displays "x"-amount of time.
2. Upon the game start (player pushes "deal" button) the player is entered for Super Keno. (Indicated by moving clock counter)
3. After the deal has finish (1 game) the clock (counter) Freezes
4. If there is time remaining on counter the clock (counter) un freezes again (showing entry to Super Keno) at the restart of play
5. The share(s) payment allows the machine to allot "x-amount" of time for Super Keno registration (Eg. 30 seconds).
6. The player will win 1 shares worth of respective Super Keno Jackpot if the clock counter on the machine is operational (moving backwards) at the time of the result.
7. All machines in the bank can detect a standard Keno result and can instantly relay this information (winning standard Division) to all machines in the link-up.

Super Keno: Additional Notes

Proportion Bets:

Super Keno can allow for the provision of proportion bets. i.e. A player many wish to bet on proportions of the full result for any desired Jackpot/Division.

In order to do this, the player places a wager in the hope that any player will win a $\frac{1}{8}$, or $\frac{2}{9}$, or $\frac{3}{10}$, etc (as selected) during the game(s) for which the player is entered and which are results which will win a prize for the Keno player.

This proportions allowed:-

= $\frac{1}{5}$, $\frac{2}{6}$, $\frac{3}{7}$, $\frac{4}{8}$, $\frac{5}{9}$, $\frac{6}{10}$, $\frac{7}{11}$, $\frac{8}{12}$, $\frac{9}{13}$, $\frac{10}{14}$, etc.

Player may purchase as many shares per Jackpot/Division as desired.

The Golden Rule may be applied 1 CREDIT = 1 share.

Winners Keno

An addition to the standard game "Winners Keno" allows players to select the number of winners per desired standard Keno Division ($\frac{1}{1}$ - $\frac{4}{4}$, etc).

Player must select how many winning results (full division) will occur per selected standard Keno division per game(s). Players may wager on a single or multi-game basis. That is players may select the amount of full winning results for any single Keno Division for 1 game (1 standard Keno game) or;

multi-game; Players may select the amount of full winning results for any single Keno Division (as desired) for a group of games. Multiple divisions (winners Keno Division $\frac{1}{1}$ - $\frac{1}{4}$, etc) may be played on a single game basis or multiple using the concept the players may;

1. Place their "Winners" wager (x-amount) only and not be required to purchase extra normal Keno tickets, or;
2. Purchase "x" amount of normal Keno tickets and pay an additional fee of x-amount for the "winners" wagers; (or both).

Number of Winners Bet

"Winners" Keno is designed to allow players to bet on the number of winners (full standard Keno results - $\frac{1}{1}$ - $\frac{1}{4}$, etc) per selected Winners Keno Jackpot/Division $\frac{1}{1}$ - $\frac{1}{4}$, etc) per selected Keno game or group of selected Keno games. The players may bet on how many 1 out of 1's, or 2 out of 2's, or 3 out of 3's etc will result for game "x" (or multiple games) of standard Keno.

Proportion Bets

"Winners" Keno can also permit the use of proportion bets as described earlier herein in relation to Super Keno. In this, players may wish to bet on proportions of the total result for any desired Division which will still lead to a winning result to the Keno player. (Players select how many, say 4/5 or 3/4 results will occur in any game or group of games.)

Zero Bet

There may be provided a bet against their being any result which leads to a jackpot being held by a player of the Keno game.

Wagers:

A wager is placed at the beginning of any standard Keno Game or group of games. Depending on the situation required the player may be required to purchase a required number of standard Keno tickets in order to play winners Keno. That is Winners Keno Fee + Standard Keno tickets Fee. After the results are known, and if a payout is in order, the player will win a payout based on

1. A share of the respective "winners" Keno Jackpot as entered. or;
2. A payout based on calculated set odds.

The wager is used to either finance a "Jackpot Base" for winners Keno, or used to help finance set odds payouts (or devised payouts) for winners Keno. A player may register a "winners" Keno wager, which is independently recorded and placed in the respective "winners" Keno Jackpot/Division as entered by the player. The player must estimate how many prizes (full winning standard Keno results) will be awarded to winning players correctly selecting a desired Keno Division $\frac{1}{x_1} - \frac{x}{y}$ per "x" number of game(s) played. So if a player

believes that " x_y " winning results will occur per " x " number of game(s) for the division of 3 out of 3, the situation would be thus:

Example 1 Single game: Single Jackpot/Division

A player places a wager " x " amount on "Winners Keno" Division 3 only (3 out of 3). The player believes that for one game only " x_y " number of full winning results will occur in that one game (for division $\frac{3}{3}$, only). So if " x_y "=9 (nine) and 9 full results are won by other Keno players (not necessarily entered in "Winners Keno") for division $\frac{3}{3}$, for that game then the player(s) entered into Winners Keno $\frac{3}{3}$, for that game wins a share of the total available Winners Keno $\frac{3}{3}$, Jackpot.

The same scenario applies to all Winners Keno Jackpot/Divisions. Winners Keno can be used in any desired game/division format. i.e. Formats for Winners Keno 1) Single Game: Single Divisions/Jackpot (Example 1), 2) Multiple game: Multiple Jackpot(s)/Divisions, 3) Single game: Multiple Jackpots/Divisions, or 4) Multiple games: Single Jackpot/Division

Example 4 Multi-game: Single Jackpot/Division.

A player places a wager " x " amount (Winners Keno wager) on Winners Keno $\frac{3}{3}$, division only (3 out of 3). The player believes for " y " number of standard games " q " number of full

winning $\frac{3}{3}$, results will occur in the "y" games. So if "q" = 27 (number selected by player) and 27 (twenty seven) full winning $\frac{3}{3}$, results do occur within the total number of "y" games entered for, then the player(s) who have correctly selected 27 winners for $\frac{3}{3}$, Winners Keno win a share (based on number of shares bought) of the total available $\frac{3}{3}$, Winners Keno Jackpot.

Example 3 Single game: Multi Jackpots/Divisions

A player places a Winner Keno wager of "x" amount on a selection of Winners Keno Jackpots (say $\frac{1}{1} \rightarrow \frac{3}{3}$) for 1 game only, the fee is distributed to all respective Winners Keno Jackpots. The player then pays an additional fee to enter Standard Keno as required and selects the number of winners per respective Winners Keno Jackpot/Division as desired. If the player correctly selects the number of winners for a respective Winners Keno Jackpot/Division in the particular game then the Player wins his share of the available Jackpots.

Winners Keno - Entry Fee

Preferably, on payment of the fee for Winners Keno the following information will be printed on either 1) Existing Keno ticker, or 2) A Winners Keno ticket.

1. The game number(s) paid for;
2. The Winners Keno Jackpots as entered ($\frac{1}{1} \rightarrow \frac{1}{4}$, etc);
3. The cost per share (fee paid) per Jackpot/Division;

4. The number of required Standard Keno games purchased.

Winners Keno - Payouts

Upon receipt of winning Winners Keno ticket the "Winners Keno" staff operator will pay the Winners Keno player the required cash amount (or cheque) based on the number of shares purchased for the winning game, and the value of the share(s) as calculated.

Winners Keno Computer Software

The software required to operate Winners Keno will need to be able to perform many tasks, which are basically those previously discussed in relation to Super Keno earlier herein and will not be again discussed.

Player Information Display

Possible display units for Super Keno were discussed earlier herein and, in general terms the displays for Winners Keno can be similar and will not be further described.

Winners Keno: Multi linked

It is envisaged that casinos operating Winners Keno may wish to link-up their Winners Keno Jackpot amounts. Such a linkage was described earlier herein in relation to Super Keno and will not be further described.

Winners Keno; Personal Gaming machines.

The use of personal gaming machines with Super Keno was described earlier herein, the same bases can be used in respect of Winners Keno.

Winners Keno: Machine Play

This was discussed in relation to Super Keno and the same general conditions apply.

Winners Keno Proportion Bets

This concept was discussed in relation to Super Keno and the same requirements apply.

General Analysis and Additional Applications

Super Keno (wager on any winning division) and Winners Keno (wager on the number of winners per respective Jackpot/Division) are both applications of the general collateral concept of the invention.

In general terms, this concept operates in two modes:

MODE 1 Operation is described in Super Keno: Players must wager on a selected Jackpot/Division to be won by any standard game player in a selected game. Usually Mode 1 is used on progressive Jackpots only.

MODE 2 Operation is described on the number of winner per

respective Standard Game Jackpot/Division. Mode 2 can be used on non progressive and progressive Jackpots. Non progressive jackpots can be termed Revenue Based Jackpots.

These two modes of operation allow the concept to be applied to a wide variety of pre established games as well as Keno.

The concept is an independently funded Jackpot pool (non progressive where desired for Mode 2 operating in conjunction with the Standard game and is activated by:

MODE 1 The results of any standard game Jackpot(s)/Division(s) in any selected Standard game (any Standard game player may win the Standard game Jackpot/Division.) Thus for Mode 1 the Jackpot/Division is activated by any player playing the Standard game, winning the full Standard Jackpot/Division which corresponds to the collateral jackpot/Division as entered by the players(s).

MODE 2 The collateral Jackpot/Division is achieved by any player correctly selecting the number of Standard game winners in a selected Jackpot/Division corresponding to the collateral Jackpot/Division as entered.

For each Mode 1 and 2

Fee The fee paid to enter the collateral game is placed

in the appropriate Jackpot/Division as entered.

Payout The payout paid to collateral game players is calculated as a share amount based on 1) the number of shares purchased by the player, 2) the total number of winning shares for respective Jackpot/Division, 3) the total available appropriate Jackpot as entered.

Application of the concept to lotto type games.

This related to any lottery draw having a major jackpot with smaller divisional prizes (stepped prizes). In most cases the lotteries operate by drawing "x" numbers out of a maximum possible numbers "y". This scenario is to be used for this example, 6 out of 45. Now remembering that:

Mode 1 Players select a desired jackpot/Division to be won by any player playing the standard game.

Mode 2 Players select the number of winners per division offered for any given game.

Mode 1 Example

A player A buys 1 share "x" in the collateral game to Tattslotto Division 1 for a game. The player A hopes that any player playing the main game will achieve the main prize thus activating the collateral game Division 1 Jackpot for the game. If so, the player wins the share amount calculated as previously set out.

Mode 2 Example

A Player A buys 1 share (x) for the collateral Tattslotto Division 3 jackpot. The player makes an estimate there will be five hundred winning tickets of Division 3. If this does occur, then the player wins and his prize share of the jackpot will be the total available jackpot divided by the number of players who estimated that there would be the correct number of winners.

This example for Tattslotto can be applied to Football Pools and Soccer Pools.

The concept can be applied to Mega Bucks, Poker Machines and Link-ups; that is any electronically linked up gaming machines having a Jackpot (progressive) as well as a Standard payout.

Operation For Machine Application

Mode 1 Operation

Players wishing to play the collateral game are charged a fee which is added to the respective Jackpot as entered. The fee = 1 credit (x amount) and buys the player 1 share (x) in the Jackpot. Any number of shares may be purchased. This fee lasts the player for, say, "y" amount of time and this time may be indicated on a digital or analogue clock timer display. The machine may offer a selection of buttons or the like allowing entry to the offered Jackpot/Divisions and to the number of shares required to be purchased by player per Jackpot. The total amount of time is indicated on the clock counter as soon as the required fee is entered by the player

into the machine.

The clock counter display begins to count backwards in seconds (x second intervals) as soon as standard play begins (player pushes standard "deal" button). Players pay usual fee(s) for standard play.

As soon as standard play stops (pauses between games) the clock counter freezes and indicated the time remaining. An indicator light may be activated when the clock counter enters "freeze" mode. This illuminated light allows the player to know that the time remaining is frozen. When standard play resumes the indicator light goes out and, if required another light becomes illuminated to show re-entry to the Jackpot as entered.

The Jackpot(s) are fully displayed as the available Jackpot (total respective Jackpot - house tax + seeding) to all players. The main Jackpot display for the bank of machines in the link could be located near the standard linked Jackpot display and on all Personal Gaming Machines in the link.

If any player playing the Bank of linked machines wins the standard game main Jackpot and the collateral Jackpot is activated while the player is entered then the player wins his/her purchased shares worth of the available collateral Jackpot.

If desired by an operator an additional fee for time allowed may be charged. This would allow players to select the amount of time required and to pay for this. The fee would be added to the respective Jackpot as entered.

The collateral game when applied to games such as: Mega Bucks, Poker Machines and Link-ups.

The game can be played with any linked-up electronic gaming machines having a progressive jackpot as well as standard payouts.

Example of Machine Play.

Mode 1 operation

Where a collateral Jackpot is being offered, the collateral game operates in conjunction with the standard main game progressive Jackpot and is activated by this. That is, any player playing the bank of interlinked machines who wins the main Jackpot (standard game) automatically activates the collateral Jackpot. and all players who are entered into the collateral game will receive a share of the collateral Jackpot.

The Jackpot is preferably displayed on a large visual display unit at the top or near the bank of machines or alongside or together with the display of the current Standard Jackpot.

Upon deciding to play player A deposits "x" amount of coins (or credit) into a desired machine. The machine displays the inputted credits. The player then selects the collateral Jackpot he/she wishes to enter and selects the number of shares he/she wishes to purchase (possible 1 credit = 1 share).

If desired by the operator players may be charged an additional fee for time entered in the collateral Jackpot thus allowing players to select the time they wish to be entered. This additional fee is added to the respective collateral Jackpot as entered by the player.

Upon selection and payment for the collateral Jackpot/Division and the number of shares required, a clock counter will indicate the time available for a win in the main Jackpot to provide a win in the collateral Jackpot.

The player begins standard game play. As soon as this is initiated the clock counter begins to count backwards.

As soon as standard play is paused (between games) the clock counter freezes and a non entry light may become illuminated thus indicating to the player that he/she is not entered in the collateral Jackpot because the machine is not in operation mode. Upon start of play again the clock counter unfreezes and again begins to count backwards. An entry light may

become illuminated to indicate this. Once the time has expired the player is no longer entered in the collateral game.

If any player playing the standard game within the bank of machines wins the standard main Jackpot while the player is entered in the collateral Jackpot then the player wins his/her shares worth of the available collateral Jackpot as displayed.

Bingo

Mode 2 Operation

Players select the number of balls drawn required to activate a Bingo.

As an additional application the collateral game can be applied to Bingo on a Mode 2 basis.

Example of Play

Before any given game begins player A buys 1 share (x amount) in the collateral Bingo Jackpot. The player then selects the number of balls drawn for a required Bingo result. This fee (1 share purchased by the player) is added to the Revenue Base for the game. The player has selected that (say) 23 numbers will be drawn for a Bingo to be achieved in the game. On Bingo, a full card, if 23 numbers have been selected in the game then the player and any entered collateral players who have selected 23 numbers to be drawn for a result will share

36

the value of the Bingo Total Revenue Base - (house tax + seeding if required) held for the game.

to select the or each selected result types.

4. A gambling game as claimed in claim 3 wherein the total amount invested for the or each winning result is adjusted by subtracting a house hold prior to making the division by the number of players in the game who had selected the result type.
5. A gambling game as claimed in claim 4 wherein a seeding amount is provided for the payment(s) for the collateral game and if the hold for the collateral game is greater than the seeding amount, when there is a winning event, then at least part of the excess is carried forward for a later play and, if necessary, an amount to make up the seeding amount is added to the pool in the later play.
6. A gambling game as claimed in claim 5 wherein part of the hold is used to repay seeding money which has been provided.
7. A gambling game as claimed in any preceding claim wherein the game is Keno and wherein the collateral game is based on the selection of a divisional prize to be won in the game.
8. A gambling game as claimed in Claim 6 wherein there can be a number of separate jackpots for the collateral game

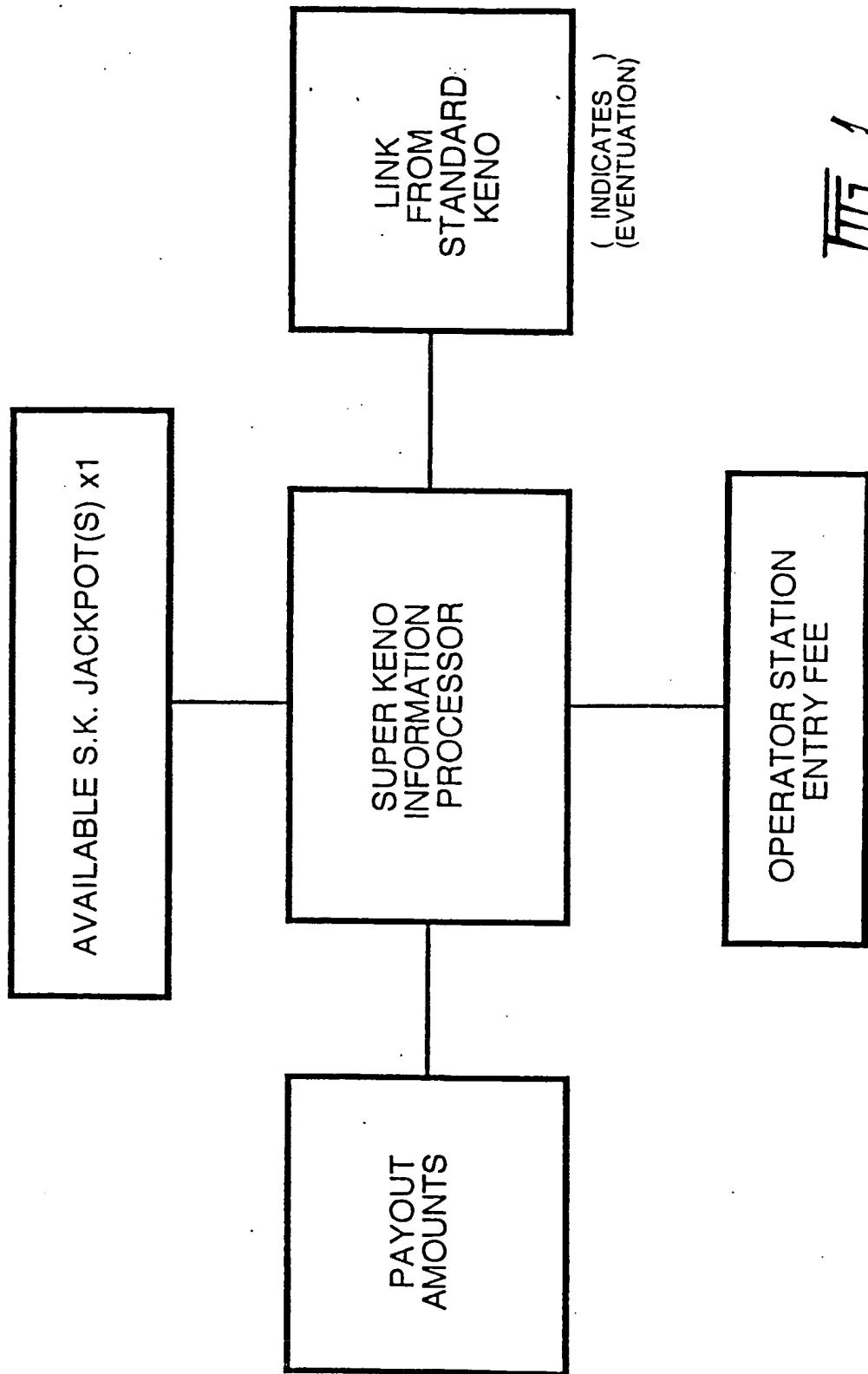
each relating to a separate division of the Keno game which jackpots can selectively be entered by the players of the collateral game so that if there is a winning result in the game, the jackpot for the specific division in which the winning result lies is divided between those players of the collateral game who have selected the particular division.

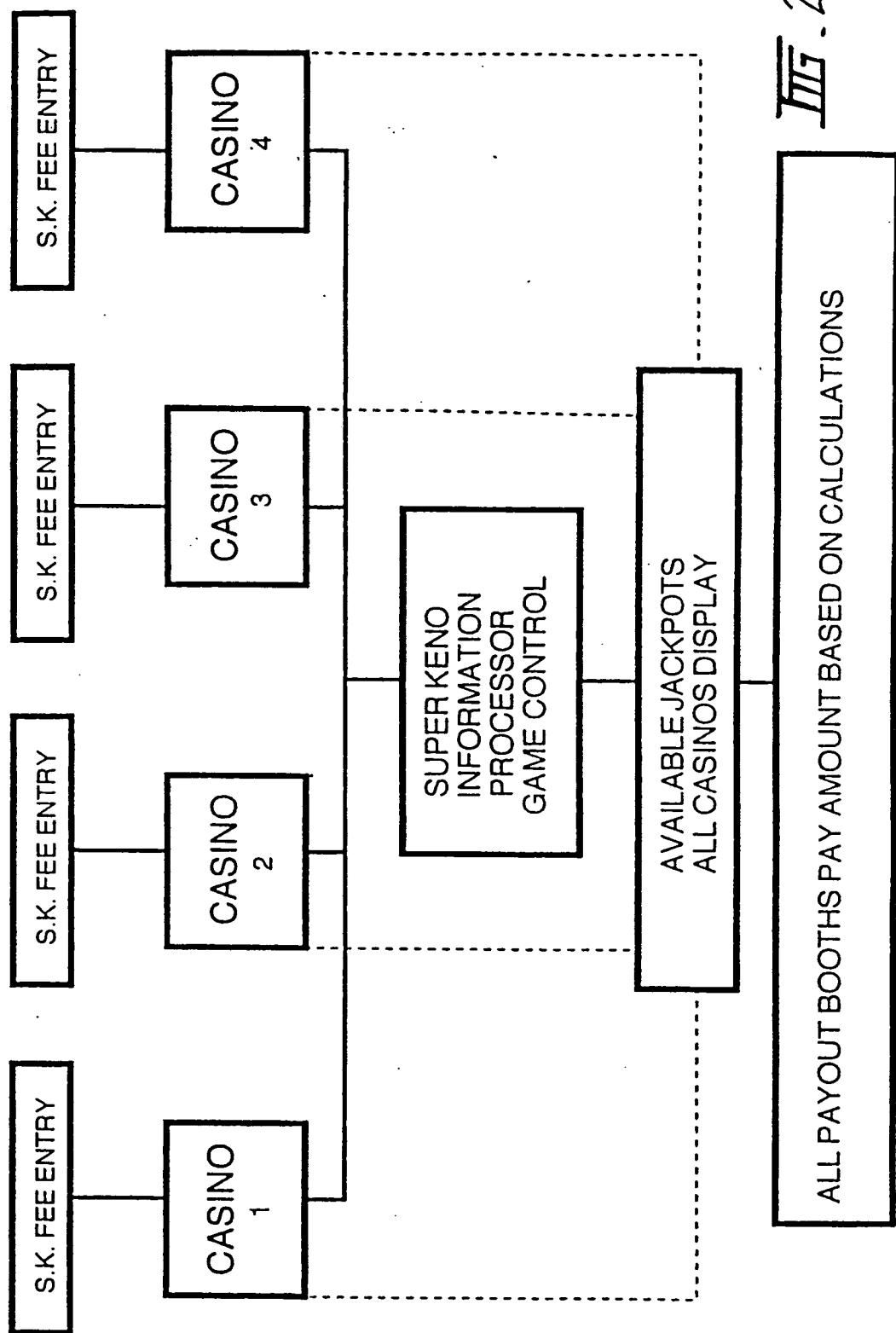
9. In a gambling game where there may be a number of events one of which can lead to a winning result type, a collateral game which can be entered by players of the game in respect of selecting a parameter associated with the winning result type characterised in that on a winning result all players of the collateral game which have selected the parameter associated with the result type are paid a share of the available amount for that parameter of the result type which payment depends on the amount invested by the individual player and the total amount invested by players in the collateral game since there has last been a winning result in which the parameter has been selected.
10. A game as claimed in claim 9 wherein the parameter is the number of players of the game who have won the particular result type.
11. A game as claimed in claim 9 wherein the game is a

"Bingo" type game and wherein the parameter is the number of symbols used before there is a winner of the game.

12. A game as claimed in any preceding claim wherein the game and the collateral game are provided on an electronic gaming machine.
13. A game as claimed in claim 11 wherein the collateral game is linked across a number of electronic gaming machines and a successful result of the collateral game is achieved on any one of the linked machines having a result which will provide a result which would provide a winning result in the collateral game.
14. A game as claimed in any preceding claim wherein the entry into the collateral game is based on a number of discrete plays of the game.
15. A game as claimed in any one of claims 1 to 13 wherein the entry into the collateral game is time based and can lead to an winning entry on any play of the game which occurs during that time.

1 / 3





3 / 3

3/3 \$ 100.05	7/7 \$ 8 652.10
4/4 \$ 715.65	8/8 \$ 14 720.50
5/5 \$1 512.75	9/9 \$ 400 000.00
6/6 \$4 728.05	10/10 \$1 200 000.00

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

SUPER KENO WIN WIN WIN WINNING JACKPOT 7/7 TOTAL JACKPOT = \$50 000 GAME: 015 SHARES PURCHASED 100 TOTAL 1 SHARE = \$500.00 NO's 5, 9, 15, 31, 34, 42, 79	1/1 2/2 3/3 4/4 5/5 6/6 7/7 8/8 9/9 10/10 11/11 ect.	10 seconds
--	---	------------

III. 3.

A. CLASSIFICATION OF SUBJECT MATTERInt. Cl.⁶ A63F 3/08, G06F 19/00, 161:00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC (Int. Cl.⁵) A63F 3/08, 3/06, G06F 15/44Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
AU : IPC as above

Electronic data base consulted during the international search (name of data base, and where practicable, search terms used)

DERWENT

JOPAL

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to Claim No.
P,X	US, 5333868 (GOLDFARB) 2 August 1994 (02.08.94) whole document	12,13
X	US, 5129652 (WILKINSON) 14 July 1992 (14.07.92) whole document	12
P,X	US, 5282620 (KEESEE) 1 February 1994 (01.02.94) whole document	12
P,X	US, 5265877 (BOYLAN et al.) 30 November 1993 (30.11.93) column 16	12

 Further documents are listed
in the continuation of Box C. See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance
 "E" earlier document but published on or after the international filing date
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
 "O" document referring to an oral disclosure, use, exhibition or other means
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
 "&" document member of the same patent family

Date of the actual completion of the international search 17 November 1994 (17.11.94)	Date of mailing of the international search report 30 Nov 1994 (30.11.94)
Name and mailing address of the ISA/AU AUSTRALIAN INDUSTRIAL PROPERTY ORGANISATION PO BOX 200 WODEN ACT 2606 AUSTRALIA Facsimile No. 06 2853929	Authorized officer J.W. THOMSON Telephone No. (06) 2832214

C(Continuation).		DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*		Citation of document, with indication, where appropriate of the relevant passages	Relevant to Claim No.
X		US, 5276312 (McCARTHY) 4 January 1994 (04.01.94) whole document	12
P,X		US, 5351970 (FIORETTI) 4 March 1994 (04.03.94) whole document	13
A		US, 4323770 (DIEULOT et al.) 6 April 1982 (06.04.82) whole document	12,13

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international search report has not established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: 1-11, 14, 15
because they relate to subject matter not required to be searched by this Authority, namely:

PCT Rule 39.1(iii).
2. Claim Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member				
US	5333868	BR	9400406	CA	2114666	US	5340119	
US	5282620	US	5286023					
US	5265877	AU US	14664/92 5257784	US	5098107	WO	9216269	
US	5276312	AU OA	91535/91 9782	BR WO	9107145 9210806	MX	9102483	
US	5351970	WO	9406526					
US	4323770	AU GB	532647 2028554	ES IT	483014 1203266	FR NZ	2435270 191058	
END OF ANNEX								